

mined surface area on which to form transistors;  
 a continuum of uniformly spaced transistors formed in  
 and covering at least a major portion of said predeter-  
 mined surface area of said semiconductor wafer with  
 said transistors being of substantially identical N-channel  
 and P-channel MOSFET transistors, said transistors  
 defining a configurable gate array from which at least  
 one application specific integrated circuit (ASIC) chip  
 is capable of being formed, said configurable gate array  
 being free of predefined boundaries along which the  
 semiconductor wafer must be cut; and  
 a plurality of islands in said surface area surrounded by  
 said plurality of transistors, said islands being void of  
 said transistors and occupying a minor portion of said  
 predetermined surface area to define a locale for receiv-  
 ing devices other than said transistors.

8. A master slice configurable gate array for use in the  
 producing of at least two semiconductor chips, each of said  
 semiconductor chips having an area which includes at a base  
 layer level only a plurality of transistors, comprising:  
 a semiconductor wafer;  
 said semiconductor wafer having a predetermined surface  
 area on which to form said configurable gate array;  
 said configurable gate array being formed from a con-  
 tinuum of transistors formed in and substantially cov-  
 ering at least a major portion of said predetermined  
 surface area of said semiconductor wafer and being free  
 of predefined boundaries therebetween;  
 said transistors being of substantially identical N-channel  
 and P-channel type MOSFET transistors; and  
 said continuum of transistors defining a region of said  
 predetermined surface area within which said semicon-  
 ductor chips are formed entirely of said transistors by  
 selectively connecting together a subset of the con-  
 tinuum of transistors and cutting through unconnected  
 transistors to separate the ASIC chip from the wafer.

9. The master slice as defined in claim 8, wherein a  
 portion of said predetermined surface area comprises:  
 a vacant peripheral area extending in a band on said  
 predetermined surface area and along an edge of said  
 wafer surrounding said sea of transistors to define a  
 border on said wafer between said wafer edge and said  
 sea of transistors, said vacant peripheral area being void  
 of any of said transistors.

10. The master slice as defined in claim 9, further com-  
 prising:  
 a plurality of islands in said predetermined surface area  
 surrounded by said continuum of transistors, said  
 islands being void of said transistors and occupying a

minor portion of said predetermined surface area to  
 define a locale for receiving devices other than said  
 transistors.

11. The master slice as defined in claim 8, further com-  
 prising:  
 a plurality of islands in said predetermined surface area  
 surrounded by said continuum of transistors, said  
 islands being void of said transistors and occupying a  
 minor portion of said predetermined surface area to  
 define a locale for receiving devices other than said  
 transistors.

12. The master slice as defined within claim 11 wherein at  
 least one of said islands falls within said region of said  
 predetermined surface.

13. The master slice as defined in claim 11 wherein at least  
 one of said islands falls outside of said region of said  
 predetermined surface.

14. The master slice as defined in claim 11 wherein at least  
 one of said plurality of islands contains an alignment marker.

15. The master slice as defined in claim 11 wherein at least  
 one of said plurality of islands contains test means.

16. The master slice as defined in claim 11 wherein at least  
 one of said plurality of islands contains an application  
 specific integrated circuit.

17. The master slice as defined in claim 8 wherein at least  
 a portion of said continuum of transistors within said region  
 comprises an input to and another portion of said continuum  
 of transistors and an output to the remainder of said con-  
 tinuum transistors within said region.

18. A configurable gate array comprising:  
 a semiconductor wafer having a major surface;  
 a continuum of transistors that are uniformly spaced in  
 rows and columns throughout substantially the entire  
 major surface of the wafer, said transistors being free of  
 boundaries therebetween, said wafer containing a suf-  
 ficient number of transistors to form a variety of  
 application specific integrated circuit (ASIC) chips of  
 different sizes from the same wafer size, the ASIC chips  
 ranging from an ASIC chip of a first size using a first  
 number of transistors to a second ASIC chip of a second  
 size utilizing substantially all of the continuum of  
 transistors in the wafer; and  
 saw lane channels overlying selected portions of the  
 transistors in the semiconductor wafer, said saw lane  
 channels defining lanes for cutting the wafer through  
 portions of the underlying transistors to define a desired  
 ASIC chip from the wafer.

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